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(54) Title: A MODULATION METHOD USING HARD DECISION FOR QUADRATURE AMPLITUDE MODULATION AND AN APPARATUS THEREOF

(57) Abstract: The invention relates to a hard decision demodulation of a square type of a quadrature amplitude modulation signal, in particular, to a hard decision demodulation method and apparatus capable of performing fast and accurate demodulation, by demodulating a received signal in bit unit when demodulating it. In a hard decision demodulation method of a square type of quadrature amplitude modulation signal, by determining in bit unit, not in symbol unit a corresponding output value from a quadrature phase component value and an in-phase component value, it is possible to develop a more useful demodulation technique and to give a secondary function by independently processing each bit, according to the demodulation of bit unit. Further, the invention can be constituted of merely a comparison circuit without having arithmetic in demodulation process, and therefore, can enhance flexibility of actual configuration and processing speed.

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